

CLAIMS

1. An aqueous resin composition having gas barrier properties, which comprises

5 (i) a polyurethane resin having a urethane group and a urea group in a total concentration of 25 to 60% by weight and having an acid group,

(ii) a swelling inorganic layered compound, and

(iii) a polyamine compound.

10 2. A resin composition according to claim 1, wherein the polyurethane resin (i) is a resin obtained by at least a reaction of (A) a polyisocyanate compound and (B) a polyhydroxyalkanoic acid, and neutralized with a neutralizing agent, and wherein the polyisocyanate compound  
15 (A) contains at least one member selected from the group consisting of an aromatic polyisocyanate, an araliphatic polyisocyanate and an alicyclic polyisocyanate.

3. A resin composition according to claim 1, wherein the polyurethane resin (i) is a resin obtained by  
20 a reaction of the following component (A), the following component (B), and at least one component selected from the group consisting of the following components (C) and (D), and neutralized with a neutralizing agent;

(A) a polyisocyanate compound which contains at least one  
25 member selected from the group consisting of an aromatic polyisocyanate, an araliphatic polyisocyanate and an alicyclic polyisocyanate in a proportion of not less than

30% by weight in the polyisocyanate compound,

(B) a polyhydroxyalkanecarboxylic acid,

(C) a polyol compound which contains a polyol component having 2 to 8 carbon atoms in a proportion of not less than  
5 90% by weight in the polyol compound, and

(D) at least one chain-extension agent selected from the group consisting of a diamine, hydrazine and a hydrazine derivative.

4. A resin composition according to claim 2,  
10 wherein the component (A) in the polyurethane resin (i) contains at least one member selected from the group consisting of a xylylene diisocyanate and a hydrogenated xylylene diisocyanate.

5. A resin composition according to claim 1,  
15 wherein the swelling inorganic layered compound (ii) comprises at least one member selected from the group consisting of a water-swelling mica and a montmorillonite.

6. A resin composition according to claim 1,  
wherein the acid value of the polyurethane resin (i) is  
20 5 to 100 mgKOH/g, the amine value of the polyamine compound (iii) is 100 to 1900 mgKOH/g, and the proportion of the acid group of the polyurethane resin (i) relative to the basic nitrogen atom of the polyamine compound (iii) is 10/1 to 1/5 as the equivalent ratio.

25 7. A resin composition according to claim 1,  
wherein the ratio of the swelling inorganic compound (ii) relative to the polyurethane resin (i) is 1/100 to 200/100

in terms of solid content.

8. A gas barrier laminated film comprising a base film, and a layer formed on at least one surface of the base film, wherein the layer comprises an aqueous resin  
5 composition recited in any one of claims 1 to 7.